

MICHIGAN

Reported Releases and Waste Management Activities (in pounds)

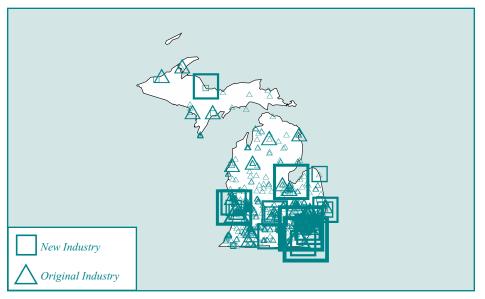
	Original Industry	New Industry	Total
On-site Releases	38,781,556	68,646,869	107,428,425
Air Emissions	33,854,916	37,341,218	71,196,133
Surface Water Discharges	1,031,658	103,201	1,134,859
Underground Injection Class I Wells	2,057,816	0	2,057,816
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	50,021	22,340,965	22,390,986
Other On-site Land Releases	1,787,145	8,861,485	10,648,630
Off-site Releases (Transfers Off-site to Disposal)*	21,191,973	11,569,597	32,761,569
Total On- and Off-site Releases	59,973,529	80,216,465	140,189,994
Recycled On-site	101,204,399	15,654,763	116,859,162
Recycled Off-site	113,415,039	251,195	113,666,234
Energy Recovery On-site	30,819,653	1,192	30,820,845
Energy Recovery Off-site	84,944,887	33,373,768	118,318,655
Treated On-site	92,762,339	9,110,961	101,873,300
Treated Off-site**	35,792,930	4,151,794	39,944,724
Quantity Released On- and Off-site***	60,342,353	80,426,900	140,769,253
Total Production-related Waste Managed	519,281,599	142,970,573	662,252,171
Non-production-related Waste Managed	21,597	461	22,058
Transfers Off-site for Further Waste Manag	gement/Disposal		
Recycling	112,544,722	481,405	113,026,127
Energy Recovery	85,169,559	32,946,144	118,115,703
Treatment	17,023,494	3,988,028	21,011,522
Publicly Owned Treatment Works (POTWs)	19,152,912	90,700	19,243,612
Metals and Metal Compounds*	191,621	19,894	211,516
Non-metal TRI Chemicals**	18,961,290	70,806	19,032,096
Other Off-site Transfers****	552	0	552
Transfers Off-site to Disposal	21,566,236	11,573,116	33,139,353
(not including metals to POTWs)			
Total Transfers Off-site for Further Waste	255,457,474	49,079,393	304,536,868
Management/Disposal			

- * Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- ** Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- *** Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- **** Transfers reported without a valid waste management code.

For More Information . . .

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The largest marker in the state map represents the largest facility for on-site releases in the state of Michigan. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

State/	TRI Data
Population	9,952,006
Square Miles	56,809
Total Facilities	915
Total Forms	3,655
Form As	413

	Original Industry	New Industry	Total
National Rank for Total On- and Off-site Release			
Rank	14	9	15
Pounds	59,973,529	80,216,465	140,189,994
National Rank for Total On-site Releases**			
Rank	18	13	19
Pounds	38,781,556	68,646,869	107,428,425
National Rank for Total Releases within State***			
Rank	9	9	12
Pounds	77,589,312	81,492,605	159,081,917
National Rank for Production-related Waste Man	aged		
Rank	14	8	15
Pounds	519,281,599	142,970,573	662,252,171

- Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- Includes amounts released at the facility. Excludes amounts transferred to other sites.
- *** Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.

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On-site and Off-site Releases for Top Five Chemicals Ranked on Total Releases in the State (All Chemicals)

		On-site Ro				Off-site Releases		Off-site	Transfers to Di	isposal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
CAS		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
7647-01-0	Hydrochloric acid	29,531,348	250	5	0	1,200	29,532,803	0	0	1,200
_	Barium compounds	293,386	35,048	0	16,197,154	6,867,407	23,392,995	742,162	6,987,444	908
_	Zinc compounds	425,469	18,433	7,300	1,332,942	13,136,041	14,920,185	9,283,357	12,777,489	382,697
1330-20-7	Xylene (mixed isomers)	6,532,805	39	300	40,052	32,634	6,605,830	15,578	14,473	19,548
67-56-1	Methanol	3,697,785	113,954	1,738,900	3,280	178,697	5,732,616	866	2,547	176,150

^{*} Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

On-site and Off-site Releases for PBT Chemicals Ranked on Total Releases in the State

		On-site Releases				Off-site Releases		Off-site Transfers to Disposal			
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred	
CAS		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of	
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State	
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
1336-36-3	Polychlorinated biphenyls (PCBs)	55.00	0.00	0.00	117,619.00	197.00	117,871.00	116.70	97.00	100.00	
_	Polycyclic aromatic compounds	18,743.78	32.68	0.00	9,749.20	909.70	29,435.36	128,228.25	639.70	270.00	
_	Mercury compounds	3,138.21	495.70	0.00	13,491.18	4,536.27	21,661.35	27,951.41	4,397.57	138.70	
118-74-1	Hexachlorobenzene	76.20	0.00	0.00	2,029.00	116.00	2,221.20	0.00	30.00	86.00	
191-24-2	Benzo(g,h,i)perylene	812.56	5.30	0.00	856.09	63.10	1,737.05	1,334.10	35.10	28.00	
7439-97-6	Mercury	861.04	0.00	0.00	22.90	330.37	1,214.31	2,079.58	152.07	185.00	
8001-35-2	Toxaphene	12.00	0.00	0.00	501.00	20.00	533.00	0.00	0.00	20.00	
57-74-9	Chlordane	1.00	0.00	0.00	44.00	4.00	49.00	0.00	2.00	2.00	
_	Dioxin and dioxin-like compounds	0.06	0.01	0.00	0.74	0.32	1.13	0.15	0.32	0.00	
_	Dioxin and dioxin-like compounds (in grams)	25.223	5.830	0.000	333.977	145.310	510.340	67.226	145.310	0.000	
309-00-2	Aldrin	***	_	_	_	_	_	_	_	_	
76-44-8	Heptachlor	***	_	_	_	_	_	_	_	_	
465-73-6	Isodrin	***	_	_	_	_	_	_	_	_	
72-43-5	Methoxychlor	***	_	_	_	_	_	_	_	_	
29082-74-4	Octachlorostyrene	***	_	_	_	_	_	_	_	_	
40487-42-1	Pendimethalin	***	_	_	_	_	_	_	_	_	
608-93-5	Pentachlorobenzene	***	_	_	_	_	_	_	_	_	
79-94-7	Tetrabromobisphenol A	***	_	_	_	_	_	_	_	_	
1582-09-8	Trifluralin	_***	_	_	_	_	_	_	_	_	

^{*} Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

^{**} The chemical ranking is based on the amounts in this column.

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^{***} No reports were submitted for these chemicals.

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On-site and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (All Chemicals)

			On-site		Off-site	Releases			
	Underground Injection On-site Releases to Land					(Transfers Off-	site to Disposal)		
		Surface			RCRA	Other	Total	Transferred	
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Within	Out of
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	State	State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Wayne Disposal Inc., Belleville, Wayne	12,482	0	0	0	22,340,965	0	22,353,447	6,381,497	19,686
Detroit Edison Monroe Power Plant, Monroe, Monroe	10,810,676	14,866	0	0	0	4,268,916	15,094,458	0	0
J. H. Campbell Generating Plant, West Olive, Ottawa	5,700,057	2,738	0	0	0	1,160,302	6,863,097	0	0
D. E. Karn-J.C. Weadock Generating Plant, Essexville, Bay	4,153,101	6,121	0	0	0	1,148,449	5,307,671	0	0
Grand Haven Board of Light & Power, Grand Haven, Ottawa	2,646,795	36	0	0	0	0	2,646,831	8,996	0
Holnam Inc. Dundee Plant, Dundee, Monroe	2,362,094	1,508	0	0	0	159,551	2,523,153	0	0
Detroit Edison Trenton Channel Power Plant, Trenton, Wayne	2,393,231	3,633	0	0	0	43,332	2,440,196	659,075	0
GMC Truck Group Pontiac East Assembly, Pontiac, Oakland	2,199,227	0	0	0	0	0	2,199,227	1,774	9,130
Pfizer Inc. Parke-Davis Div., Holland, Ottawa	69,740	0	1,791,155	0	0	0	1,860,895	14,130	265
Lansing Board of Water & Light- Eckert, Lansing, Ingham	1,741,397	28,720	0	0	0	0	1,770,117	1,960,887	0

^{*} The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

On-site and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (PBT Chemicals)

			On-site		Off-site	Releases			
	Underground Injection On-site Releases to Land					(Transfers Off-	rs Off-site to Disposal)		
		Surface			RCRA	Other	Total	Transferred	Transferred
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Within	Out of
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	State	State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Wayne Disposal Inc., Belleville, Wayne	285.00	0.00	0.00	0.00	142,973.00	0.00	143,258.00	4,515.00	506.00
National Steel Corp. Greatlakes Ops., Ecorse, Wayne	11,821.70	0.00	0.00	0.00	0.00	0.00	11,821.70	43.50	185.00
Honeywell, Detroit, Wayne	6,860.00	0.00	0.00	0.00	0.00	0.00	6,860.00	0.00	0.00
Detroit Edison Monroe Power Plant, Monroe, Monroe	810.32	3.00	0.00	0.00	0.00	316.00	1,129.32	0.00	0.00
American Stone-Mix Inc., New Boston, Wayne	770.00	0.00	0.00	0.00	0.00	0.00	770.00	100.00	0.00
J. H. Campbell Generating Plant, West Olive, Ottawa	406.01	0.00	0.00	0.00	0.00	282.00	688.01	0.00	0.00
Lansing Board of Water & Light- Eckert, Lansing, Ingham	97.90	473.00	0.00	0.00	0.00	0.00	570.90	87.20	0.00
D. E. Karn-J.C. Weadock Generating Plant, Essexville, Bay	300.01	1.00	0.00	0.00	0.00	249.00	550.01	0.00	0.00
Detroit Edison-Belle River Power Plant, China Township, St Clair	343.74	8.00	0.00	0.00	0.00	99.19	450.93	0.00	0.00
Detroit Edison-St. Clair Power Plant, East China Township, St Clair	260.11	7.00	0.00	0.00	0.00	68.00	335.11	115.00	0.00

^{*} The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (All Chemicals)

								Total	Total Non-
			Energy	Energy			Quantity	Production-	Production-
	Recycled	Recycled	Recovery	Recovery	Treated	Treated	Released On-	related	related
Facility, City, County	On-site	Off-site	On-site	Off-site	On-site	Off-site	and Off-site*	Waste Managed	Waste Managed
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Wayne Disposal Inc., Belleville, Wayne	0	0	0	0	17,735	0	28,754,630	28,772,365	0
Detroit Edison Monroe Power Plant, Monroe, Monroe	0	0	0	0	2,322,500	2	15,577,627	17,900,128	0
National Steel Corp. Greatlakes Ops., Ecorse, Wayne	7,923,123	555	0	0	2,908,000	25,820	11,169,740	22,027,238	650
J. H. Campbell Generating Plant, West Olive, Ottawa	0	0	0	0	465,000	0	6,859,690	7,324,690	0
D. E. Karn-J.C. Weadock Generating Plant, Essexville, Bay	0	0	0	0	617,000	0	5,302,049	5,919,049	0
Lansing Board of Water & Light- Eckert, Lansing, Ingham	0	92,903	0	0	0	0	3,731,004	3,823,907	0
Detroit Edison Trenton Channel Power Plant, Trenton, Wayne	0	0	0	1	629,580	1	3,105,248	3,734,829	0
Grand Haven Board of Light & Power, Grand Haven, Ottawa	0	0	0	0	0	0	2,655,787	2,655,787	0
Holnam Inc. Dundee Plant, Dundee, Monroe	72,217	0	0	0	0	0	2,428,153	2,500,370	0
Detroit Edison River Rouge Power Plant, River Rouge, Wayne	0	0	0	1	509,360	1	2,319,135	2,828,498	0

^{*} The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (PBT Chemicals)

								Total	Total Non-
			Energy	Energy			Quantity	Production-	Production-
	Recycled	Recycled	Recovery	Recovery	Treated	Treated	Released On-	related	related
Facility, City, County	On-site	Off-site	On-site	Off-site	On-site	Off-site	and Off-site*	Waste Managed	Waste Managed
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Wayne Disposal Inc., Belleville, Wayne	0	0	0	0	515	0	148,279	148,794	0
National Steel Corp. Greatlakes Ops., Ecorse, Wayne	0	0	0	0	0	0	11,950	11,950	0
Honeywell, Detroit, Wayne	0	0	0	0	0	0	6,860	6,860	0
Detroit Edison Monroe Power Plant, Monroe, Monroe	0	0	0	0	502,500	2	1,127	503,628	0
American Stone-Mix Inc., New Boston, Wayne	0	0	0	0	0	0	870	870	0
J. H. Campbell Generating Plant, West Olive, Ottawa	0	0	0	0	0	0	690	690	0
Lansing Board of Water & Light- Eckert, Lansing, Ingham	0	3	0	0	0	0	658	661	0
D. E. Karn-J.C. Weadock Generating Plant, Essexville, Bay	0	0	0	0	0	0	549	549	0
Detroit Edison-St. Clair Power Plant, East China Township, St Clair	0	0	1,010	0	271,618	0	455	273,083	0
Detroit Edison-Belle River Power Plant, China Township, St Clair	0	0	91	0	301,500	0	452	302,043	0

^{*} The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.